



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/356,241	07/16/1999	CARY LEE BATES	IBM/96	7560

7590 05/10/2002

SCOTT A STINEBRUNER  
WOOD HERRON & EVANS LLP  
2700 CAREW TOWER  
441 VINE STREET  
CINCINNATI, OH 452022917

EXAMINER

TRUONG, CAM Y T

ART UNIT PAPER NUMBER

2172

DATE MAILED: 05/10/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

PA

# Office Action Summary

Application No.

09/356,241

Applicant(s)

BATES ET AL.

Examiner

Cam Y T Truong

Art Unit

2172

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-27, 38 and 48-66 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27, 38, 48-58 and 64-66 is/are rejected.
- 7) ☒ Claim(s) 59-63 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Applicant filled appeal Brief on 2/27/02. Examiner withdraws the final rejection mailed on 9/24/01.

Applicant's arguments with respect to claims 1-27, 38, 48-66 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-27 and 48-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shoham (USP5855015) in view of Rose et al (USP 5724567).

As to claim 1, Shoham teaches the claimed limitations:

"in response to a search request, generating a result set including identifications of a subset of a plurality of records in a database that match the search request" as the user enter a specific or general query at block 120, or select an information resource of interest to initialize the heuristics, the system will determine which information resources to present to the user. This information shows that the system generate information resources what match with user input (fig. 4, col. 8, lines 25-31);

"ordering the identifications of the records in the result set using a user feedback parameter associated with each record in the result set" as 20 information resources

Art Unit: 2172

each having a ranking between zero and ten indicative of their relevance or "interestingness" to the user. The heuristics developed based on the training examples continually adapt to the user's interests as determined by the user feedback (col. 8, lines 5-20).

Shoham fails to teach the claimed limitation "for each of the plurality of records, selectively updating the user feedback parameter associated therewith in response to detecting multiple accesses thereto by a user". However, Rose teaches that that each user profile also comprises a vector, based upon the user's indications as to his relative interest in previously retrieved documents. Each time a user provide a new response to a retrieved message, the profile vector is modified in accordance with the results of the indication. For example, if the user indicates interest in a document, all of the significant terms in that document can be given increased weight in the user's profile. A message has been selected by the user, the client program informs the server 10 of the selected message. In response, the server retrieves the complete text of the message, which is illustrated in fig. 3. If the user found the message to be of interest, a thumbs-up icon 38 can be selected. Alternatively, if the message was of little or no interest to the user, a thumbs-down icon 40 can be selected. When either of these two icons is selected, the indication provided thereby is forward to the server 10, where it is used to update the user profile, which contains messages. Each time a message is retrieved such as the data on which the message was posted to the system, the message's author, and the title or subject of the message, feedback information regarding the user's degree of

Art Unit: 2172

interest is obtained, to thereby maintain an up-to-date profile for the user, where user's profile contains messages (col. 4, lines 25-60; col. 5, lines 20-60; col. 6, lines 30-35).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to modify Rose's teaching of each user profile also comprises a vector, based upon the user's indications as to his relative interest in previously retrieved documents. Each time a user provide a new response to a retrieved message, the profile vector is modified in accordance with the results of the indication. For example, if the user indicates interest in a document, all of the significant terms in that document can be given increased weight in the user's profile. If the user found the message to be of interest, a thumbs-up icon 38 can be selected. Alternatively, if the message was of little or no interest to the user, a thumbs-down icon 40 can be selected. When either of these two icons is selected, the indication provided thereby is forward to the server 10, where it is used to update the user profile, which contains messages. Each time a message is retrieved such as the data on which the message was posted to the system, the message's author, and the title or subject of the message, feedback information regarding the user's degree of interest is obtained, to thereby maintain an up-to-date profile for the user to Shoham's system in order to save time for searching or indicating user's degree of interest in each retrieve document and provide a convenient mechanism for notifying users when new items of information have been posted.

As to claims 2, Shoham fails to teach the claimed limitation "selectively updating the user feedback.....the first record". However, Rose teaches that each user profile also comprises a vector, based upon the user's indications as to his relative interest in previously retrieved documents. Each time a user provides a new response to a retrieved message, the profile vector is modified in accordance with the results of the indication. For example, if the user indicates interest in a document, all of the significant terms in that document can be given increased weight in the user's profile (col. 6, lines 30-35).

As to claims 3 and 15, Shoham fails to teach the claimed limitation "updating the user feedback parameter includes increasing a weight for the user feedback parameter associated with a first record in response to the first record being the most recently accessed record in the result set". However, Rose teaches that if the user indicates interest in a document, all of the significant terms in that document can be given increased weight in the user's profile (col. 6, lines 30-35).

As to claims 4 and 17, Shoham teaches the claimed limitations:

"a plurality of weights, each weight associated with a keyword in the associated record" as the search heuristic is a approach which is to extract fit number of keywords from each document; the user's interests were represented with keywords and associated weight (col. 11, lines 16-20).

Shoham fails to teach the claimed limitation "ordering the records in the result set using the user feedback parameter associated with each record in the result set includes ordering the records using any weight associated with a keyword matching the search request". However, Rose teaches that a message has been selected by the user, the client program informs the server 10 of the selected message. In response, the server retrieves the complete text of the message which is illustrated in fig. 3. If the user found the message to be of interest, a thumbs-up icon 38 can be selected. Alternatively, if the message was of little or no interest to the user, a thumbs-down icon 40 can be selected. When either of these two icons is selected, the indication provided thereby is forward to the server 10, where it is used to update the user profile, which contains messages. Each time a message is retrieved such as the data on which the message was posted to the system, the message's author, and the title or subject of the message, feedback information regarding the user's degree of interest is obtained, to thereby maintain an up-to-date profile for the user, where user's profile contains messages (col. 4, lines 25-60; col. 5, lines 20-60). This information shows that after user updates his or her interest in a particular message, user profile is updated to indicate of degree of interest for each message including date and time for each message.

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to modify Rose's teaching of updating user profile to indicate of degree of interest for each message including date and time for each message in order to save time for searching or indicate user's degree of interest in each retrieve

Art Unit: 2172

document and provide a convenient mechanism for notifying users when new items of information have been posted.

As to claims 5 and 18, Shoham teaches the claimed limitation “increasing a first weight for the user feedback parameter associated with a first record in response to receipt of a search request matching a first keyword associated with the first weight” as (col. 11, lines 1-20).

As to claims 6, 19, and 51, Shoham teaches the claimed limitation “generating the result set includes accessing a search request data structure that includes a plurality of search request records, each including a search request parameter identifying a unique combination of keywords, and a result set parameter identifying a subset of records in the database that match the unique combination of keywords” as (fig. 1, col. 5, lines 62-67; col. 6, lines 13-20).

As to claims 7 and 20, Shoham fails to teach the claimed limitation “partitioning the result set into a plurality of relevance groups, with each relevance group including identifications of records having like relevancies to the search request; sorting the identifications or records within each relevance group according to the user feedback parameters associated therewith”.



However, Shoham teaches that determining which information sources to present to the user. This information indicates partitioning or selecting relevance information, which matches to the user's request. The input to the heuristics initialization, i.e. the training examples, consists of 20 information resources each having a ranking between zero and ten indicative of their relevance or interestingness to the use. The output of the initialization process would be a function that takes any web information resources and returns a ranking within the range of zero to ten, where the heuristics developed based on the training examples continually adapt to the user's interests as determined by the user feedback (fig. 4, col. 8, lines 25-31). This information shows that the system determines information resources, which may contain a list of documents or data records obviously, match with user requests.

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to modify Shoham's teaching of which information sources to present to the user. The output of the initialization process would be a function that takes any web information resources and returns a ranking within the range of zero to ten, where the heuristics developed based on the training in order to provide the most relevance results to a user.

As to claims 8 and 21, Shoham teaches the claimed limitations

"each record in database includes a Uniform Resource Identifier (URL) that identifies a document stored on a computer network" as information sources are authored utilizing the HTML and the hyperlinks are defined utilizing Uniform Resource

Art Unit: 2172

Locators (URL's). Also HTTP is utilized to explore and retrieve the associated information resource specified by the URL (col. 6, lines 10-20)";

"the document stored at the URL associated with the first record" as (col. 6, lines 10-20). Shoham fails to teach the claimed limitation "wherein selectively updating the user feedback parameter includes selectively updating the user feedback parameter associated with a first record in the database in response to detecting multiple accesses". However, Rose teaches the above claimed limitation in col. 6, lines 30-35. It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to modify Rose's teaching of each user profile also comprises a vector, based upon the user's indications as to his relative interest in previously retrieved documents. Each time a use provides a new response to a retrieved message, the profile vector is modified in accordance with the results of the indication. For example, if the user indicates interest in a document, all of the significant terms in that document can be given increased weight in the user's profile to Shoham's system in order to save time for searching or indicate user's degree of interest in each retrieve document and provide a convenient mechanism for notifying users when new items of information have been posted.

As to claims 9 and 22, Shoham fails to teach the claimed limitation "generating the result set includes generating at least one hypertext document including a plurality of hypertext links, each of which configured to access a document identified by a record in the result set". However, Shoham teaches that the user may also enter a specific or

Art Unit: 2172

general query at block 120, or select an information resource of interest to initialize the heuristics. A null query indicates that the system should simply start exploring and use subsequent presentation and relevance feedback to shape the heuristics and determine which information resources to present to the user. Information resources are authored utilizing the HTML and the hyperlinks are defined URL's (col. 8, lines 25-30; col. 6, lines 15-20).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to modify Shoham's teaching of the user may also enter a specific or general query at block 120, or select an information resource of interest to initialize the heuristics. A null query indicates that the system should simply start exploring and use subsequent presentation and relevance feedback to shape the heuristics and determine which information resources to present to the user. Information resources are authored utilizing the HTML and the hyperlinks are defined URL's in order to return the most relevance of information resources to user.

As to claim 10, Shoham teaches the claimed limitations

"generating a script associated with at least one of the records in the result set" as using HTML to structure the information which associated with the results (col. 10, lines 24-37). This information shows that the system should generate a script in order to structure the information which associasted with the results.

Shoham fails to teach the claimed limitations "the script configured....receiving the notification". However, Rose teaches the claimed limitations:

"the script configured to generate a notification that the associated record has been accessed by a user" as after user reads the document, as indicated in the table 42. If the user had not yet voted, a value of zero would be used for weight factor. Rather than using the values +1 and -1, any other numbering arrangement can be employed to indicate a user's vote. The resulting scores are then ranked to determine the order of presentation (col. 7, lines 35-40). This information indicates that the any score is represented as a notification that the associated record has been accessed by a user. The system should include a script to generate scores or a notification for each document in order to show the document has been accessed by a user.

"detecting multiple accesses to the document stored at the URL associated with the first record includes receiving the notification" as each user profile also comprises a vector, based upon the user's indications as to his relative interest in previously retrieved documents. Each time a user provides a new response to a retrieved message, the profile vector is modified in accordance with the results of the indication. For example, if the user indicates interest in a document, all of the significant terms in that document can be given increased weight in the user's profile (col. 6, lines 30-35).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to modify Rose's teaching of after user reads the document, as indicated in the table 42. If the user had not yet voted, a value of zero would be used for weight factor. Rather than using the values +1 and -1, any other numbering arrangement can be employed to indicate a user's vote. The resulting scores are then ranked to determine the order of presentation. Each user profile also comprises a

Art Unit: 2172

vector, based upon the user's indications as to his relative interest in previously retrieved documents. Each time a user provides a new response to a retrieved message, the profile vector is modified in accordance with the results of the indication. For example, if the user indicates interest in a document, all of the significant terms in that document can be given increased weight in the user's profile to Shoham's system in order to save time for searching or indicate user's degree of interest in each retrieve document, provide a convenient mechanism for notifying users when new items of information have been posted and save time for searching or retrieving a document.

As to claim 11, Shoham teaches the claimed limitations:

"a memory within which is resident a plurality of records from a database, each record associated with a user feedback parameter" as in memory 82 stores information source which is associated with user feedback as shown in fig 4-5 (col. 7, lines 5-30);

"a first program, resident in the memory, the first program configured to, in response to a search request, generate a result set including identifications of a subset of the plurality of records that match the search request, and to order the identifications of the records in the result set using the user feedback parameter associated with each record in the result set" as (col. 8, lines 8-24).

Shoham fails to teaches the claimed limitation "a second program, resident in the memory, the second program configured to, for each of the plurality of records, selectively update the user feedback parameter associated therewith in response to

multiple accesses thereto by a user". However, Rose teaches the above claimed limitation in col. 6, lines 30-35.

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to modify Rose's teaching of each user profile also comprises a vector, based upon the user's indications as to his relative interest in previously retrieved documents. Each time a user provides a new response to a retrieved message, the profile vector is modified in accordance with the results of the indication. For example, if the user indicates interest in a document, all of the significant terms in that document can be given increased weight in the user's profile to Shoham's system in order to save time for searching or indicate user's degree of interest in each retrieve document and provide a convenient mechanism for notifying users when new items of information have been posted.

As to claim 12, Shoham teaches the same claimed limitations as claim 11 except, Shoham fails to teach the claimed limitation "a signal bearing medium bearing the first and second programs". However, Shoham teaches that the user may also enter a specific or general query or select an information resource of interest to initialize the heuristics. A null query indicates subsequent presentation and relevance feedback to shape the heuristics and determine which information resources to present to the user. This information shows that the system should have a program in order to match documents with user's request; a memory 82 (col. 8, lines 25-30). Also, Rosa teaches that each user profile also comprises a vector, based upon the user's indications as to

Art Unit: 2172

his relative interest in previously retrieved documents. Each time a user provides a new response to a retrieved message, the profile vector is modified in accordance with the results of the indication. For example, if the user indicates interest in a document, all of the significant terms in that document can be given increased weight in the user's profile. This information indicates that the system should have a program in order to detect times user access document (col. 6, lines 30-35). It is obviously that the memory 82 can be used as a signal medium to synchronize between those programs. It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Shoham's teaching of the user may also enter a specific or general query or select an information resource of interest to initialize the heuristics. A null query indicates subsequent presentation and relevance feedback to shape the heuristics and determine which information resources to present to the user. This information shows that the system should have a program in order to match documents with user's request; a memory 82; and Rose's teaching of each user profile also comprises a vector, based upon the user's indications as to his relative interest in previously retrieved documents. Each time a user provides a new response to a retrieved message, the profile vector is modified in accordance with the results of the indication. For example, if the user indicates interest in a document, all of the significant terms in that document can be given increased weight in the user's profile in order to run the system and save time for search or indicating user's degree of interest in each retrieve document.

As to claims 13, 26, and 57, Shoham teaches the claimed limitation "the signal bearing medium includes at least one of a recordable medium" as (col. 6, lines 60-67; col. 7, lines 1-5) "a transmission type medium" as (col. 5, lines 50-60).

As to claim 14, Shoham teaches the same claimed limitations in claim 1, except Shoham fails to teach the claimed limitation "for each of the plurality of records, selectively updating the user feedback parameter associated therewith in response to detecting that the record is the most recently accessed record in the result set". However, Rose teaches that a message has been selected by the user, the client program informs the server 10 of the selected message. In response, the server retrieves the complete text of the message which is illustrated in fig. 3. If the user found the message to be of interest, a thumbs-up icon 38 can be selected. Alternatively, if the message was of little or no interest to the user, a thumbs-down icon 40 can be selected. When either of these two icons is selected, the indication provided thereby is forward to the server 10, where it is used to update the user profile, which contains messages. Each time a message is retrieved such as the data on which the message was posted to the system, the message's author, and the title or subject of the message, feedback information regarding the user's degree of interest is obtained, to thereby maintain an up-to-date profile for the user, where user's profile contains messages (col. 4, lines 25-60; col. 5, lines 20-60). This information shows that after user updates his or her interest in a particular message, user profile is updated to indicate of degree of interest for each message including date and time for each message. It would have been



Art Unit: 2172

obvious to a person of an ordinary skill in the art at the time the invention was made to modify Rose's teaching of updating user profile to indicate of degree of interest for each message including date and time for each message in order to save time for searching or indicate user's degree of interest in each retrieve document and provide a convenient mechanism for notifying users when new items of information have been posted.

As to claim 16, Shoham fails to teach the claimed limitation "increasing a weight for the user feedback parameter associated with a first record in response to the number times a user accesses the first record". However, Rose teaches that each user profile also comprises a vector, based upon the user's indications as to his relative interest in previously retrieved documents. Each time a user provide a new response to a retrieved message, the profile vector is modified in accordance with the results of the indication. For example, if the user indicates interest in a document, all of the significant terms in that document can be given increased weight in the user's profile (col. 6, lines 30-35).

As to claim 23, Shoham teaches the claimed limitations

"generating a script associated with at least one of the records in the result set" as using HTML to structure the information which associated with the results (col. 10, lines 24-37). This information shows that the system should generate a script in order to structure the information, which associated with the results.

Shoham fails to teach the claimed limitations “the script configured...receiving the notification”. However, Rose teaches the claimed limitations:

“the script configured to generate a notification that the associated record has been accessed by a user” as after user reads the document, as indicated in the table 42. If the user had not yet voted, a value of zero would be used for weight factor. Rather than using the values +1 and -1, any other numbering arrangement can be employed to indicate a user’s vote. The resulting scores are then ranked to determine the order of presentation (col. 7, lines 35-40). This information indicates that the any score is represented as a notification that the associated record has been accessed by a user. The system should include a script to generate scores or a notification for each document in order to show the document has been accessed by a user.

“detecting multiple accesses to the document stored at the URL associated with the first record includes receiving the notification” as each user profile also comprises a vector, based upon the user’s indications as to his relative interest in previously retrieved documents. Each time a user provides a new response to a retrieved message, the profile vector is modified in accordance with the results of the indication. For example, if the user indicates interest in a document, all of the significant terms in that document can be given increased weight in the user’s profile (col. 6, lines 30-35).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to modify Rose’s teaching of after user reads the document, as indicated in the table 42. If the user had not yet voted, a value of zero would be used for weight factor. Rather than using the values +1 and -1, any other numbering

Art Unit: 2172

arrangement can be employed to indicate a user's vote. The resulting scores are then ranked to determine the order of presentation. Each user profile also comprises a vector, based upon the user's indications as to his relative interest in previously retrieved documents. Each time a user provide a new response to a retrieved message, the profile vector is modified in accordance with the results of the indication. For example, if the user indicates interest in a document, all of the significant terms in that document can be given increased weight in the user's profile to Shoham's system in order to save time for searching or indicate user's degree of interest in each retrieve document, provide a convenient mechanism for notifying users when new items of information have been posted and save time for searching or retrieving a document.

As to claim 24, Shoham teaches the same claimed limitation in claim 11 and 14.

As to claim 25, Shoham teaches the same claimed limitation in 24, except Shoham fails to teach the claimed limitation "a signal bearing medium bearing the first and second programs". However, Shoham teaches that the user may also enter a specific or general query or select an information resource of interest to initialize the heuristics. A null query indicates subsequent presentation and relevance feedback to shape the heuristics and determine which information resources to present to the user. This information shows that the system should have a program in order to match documents with user's request; a memory 82 (col. 8, lines 25-30). Also, Rosa teaches that each user profile also comprises a vector, based upon the user's indications as to

Art Unit: 2172

his relative interest in previously retrieved documents. Each time a user provide a new response to a retrieved message, the profile vector is modified in accordance with the results of the indication. For example, if the user indicates interest in a document, all of the significant terms in that document can be given increased weight in the user's profile. This information indicates that the system should have a program in order to detect times user access document (col. 6, lines 30-35). It is obviously that the memory 82 can be used as a signal medium to synchronize between those programs.

As to claim 27, Shoham teaches the claimed limitations:

"in response to a search request.....that match the search request" as (col. 8, lines 25-30; col. 6, lines 15-20);

"ordering the identifications of the records ....in the result set....that match the search request" as (col. 8, lines 15-25; col. 11, lines 15-20; col. 8, lines 5-25). Shoham fails to teach the claimed limitation "for each of the plurality .....to user interaction with the record". However, Rose teaches the above claimed limitation in col. 6, lines 30-35.

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to modify Rose's teaching of each user profile also comprises a vector, based upon the user's indications as to his relative interest in previously retrieved documents. Each time a user provides a new response to a retrieved message, the profile vector is modified in accordance with the results of the indication. For example, if the user indicates interest in a document, all of the significant terms in that document can be given increased weight in the user's profile to Shoham's system

Art Unit: 2172

in order to save time for searching or indicate user's degree of interest in each retrieve document and provide a convenient mechanism for notifying users when new items of information have been posted.

As to claim 48, Shham teaches the claimed limitation "selectively updating at least one weight.....search request for the user" as (col. 11, lines 1-20).

As to claim 49, Shoham fails to teach the claimed limitation "selectively updating.....multiple accesses thereto by a user". However, Rose teaches that each user profile also comprises a vector, based upon the user's indications as to his relative interest in previously retrieved documents. Each time a user provide a new response to a retrieved message, the profile vector is modified in accordance with the results of the indication. For example, if the user indicates interest in a document, all of the significant terms in that document can be given increased weight in the user's profile (col. 6, lines 30-35).

As to claim 50, Shoham fails to teach the claimed limitation "updating at least weight for the user feedback parameter includes increasing .....the most recently accessed record in the result set". However, Rose teaches that if the user indicates interest in a document, all of the significant terms in that document can be given increased weight in the user's profile (col. 6, lines 30-35).

As to claim 52, Shoham fails to teach the claimed limitation "partitioning the result set into a plurality of relevance groups..... user feedback parameters associated therewith". However, Shoham teaches that determining which information sources to present to the user. This information indicates partitioning or selecting relevance information, which matches to the user's request. The input to the heuristics initialization, i.e. the training examples, consists of 20 information resources each having a ranking between zero and ten indicative of their relevance or interestingness to the use. The output of the initialization process would be a function that takes any web information resources and returns a ranking within the range of zero to ten, where the heuristics developed based on the training examples continually adapt to the user's interests as determined by the user feedback (fig. 4, col. 8, lines 25-31). This information shows that the system determines information resources, which may contain a list of documents or data records obviously, match with user requests.

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to modify Shoham's teaching of which information sources to present to the user. The output of the initialization process would be a function that takes any web information resources and returns a ranking within the range of zero to ten, where the heuristics developed based on the training in order to provide the most relevance records to a user.

As to claim 53, Shoham teaches the claimed limitations

"each record in database includes a Uniform Resource Identifier (URL) that identifies a document stored on a computer network" as information sources are authored utilizing the HTML and the hyperlinks are defined utilizing Uniform Resource Locators (URL's). Also HTTP is utilized to explore and retrieve the associated information resource specified by the URL (col. 6, lines 10-20)";

Shoham fails to teach the claimed limitation "wherein selectively updating the user feedback parameter includes .....user interaction with the first record". However, Rose teaches the above claimed limitation in col. 6, lines 30-35. It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to modify Rose's teaching of each user profile also comprises a vector, based upon the user's indications as to his relative interest in previously retrieved documents. Each time a user provide a new response to a retrieved message, the profile vector is modified in accordance with the results of the indication. For example, if the user indicates interest in a document, all of the significant terms in that document can be given increased weight in the user's profile to Shoham's system in order to save time for searching or indicate user's degree of interest in each retrieve document and provide a convenient mechanism for notifying users when new items of information have been posted.

As to claim 54, Shoham fails to teach the claimed limitation "generating the result .....a record in the result set". However, Shoham teaches that the user may also enter a specific or general query at block 120, or select an information resource of interest to

Art Unit: 2172

initialize the heuristics. A null query indicates that the system should simply start exploring and use subsequent presentation and relevance feedback to shape the heuristics and determine which information resources to present to the user.

Information resources are authored utilizing the HTML and the hyperlinks are defined URL's (col. 8, lines 25-30; col. 6, lines 15-20).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to modify Shoham's teaching of the user may also enter a specific or general query at block 120, or select an information resource of interest to initialize the heuristics. A null query indicates that the system should simply start exploring and use subsequent presentation and relevance feedback to shape the heuristics and determine which information resources to present to the user. Information resources are authored utilizing the HTML and the hyperlinks are defined URL's in order to return the most relevance of information resources to user.

As to claim 55 recites the same limitations as referred to claims 24 and 27. Therefore, it is rejected under the same rational.

As to claim 56 recites the same limitations as referred to claims 55 and 25. Therefore, it is rejected under the same rational.

4. Claims 38 and 64-66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Himmel et al (USP 6324566).



As to claim 38, Himmel teaches the claimed limitations:

“receiving a search request that specifies a plurality of keywords” as (col. 7, lines 45-50);

“accessing a search request data structure in response to the search request, .....a plurality of search request records” as (col. 8, lines 30-35).

Himmel fails to teach the claimed limitation “each search request record including a search request identifier identifying a unique combination of keywords, and a results set identifier identifying a subset of a plurality of records in a database that match the unique combination of keywords, where accessing the search request data structure includes searching the search request data structure to locate a search request record including a search request identifier that matches the plurality of keywords in the search request; generating a result set identifying the subset of records identified in the result set identifier in the located search request record”. However, Himmel teaches that when a search query from a client containing a set of keywords is received, the stored book mark sets are searched for one or more bookmark sets associated with at least one keyword matching a keyword from the search query. A list of bookmark sets which satisfy the query, i.e. are associated with matching keywords, are returned to the client browser (col. 2, lines 65-67; col. 3, lines 1-10).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Himmel's teaching of search query from a client containing a set of keywords is received, the stored book mark sets are searched for one or more bookmark sets associated with at least one keyword matching a keyword

Art Unit: 2172

from the search query. A list of bookmark sets which satisfy the query, i.e. are associated with matching keywords, are returned to the client browser in order to retrieve the most relevance records to user's request.

As to claim 64, Himmel teaches the claimed limitations:

"a memory.....including a plurality of search request records" as (col.3, lines 35-55). Himmel fails to teach the claimed limitation "each search request record.....combination of keywords;....located search request record".

However, Himmel teaches that when a search query from a client containing a set of keywords is received, the stored book mark sets are searched for one or more bookmark sets associated with at least one keyword matching a keyword from the search query. A list of bookmark sets which satisfy the query, i.e. are associated with matching keywords, are returned to the client browser (col. 2,lines 65-67; col. 3, lines 1-10). It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Himmel's teaching of search query from a client containing a set of keywords is received, the stored book mark sets are searched for one or more bookmark sets associated with at least one keyword matching a keyword from the search query. A list of bookmark sets which satisfy the query, i.e. are associated with matching keywords, are returned to the client browser in order to retrieve the most relevance records to user's request.

As to claim 65, Himmel teaches the claimed limitations

Art Unit: 2172

"a memory within which is resident a search request data structure" as (col. 3, lines 35-55). Himmel fails to teach the claimed limitation "a program configured to, in response to a search request.....in the located search request record". However, Himmel teaches that when a search query from a client containing a set of keywords is received, the stored book mark sets are searched for one or more bookmark sets associated with at least one keyword matching a keyword from the search query. A list of bookmark sets which satisfy the query, i.e. are associated with matching keywords, are returned to the client browser (col. 2, lines 65-67; col. 3, lines 1-10).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Himmel's teaching of search query from a client containing a set of keywords is received, the stored book mark sets are searched for one or more bookmark sets associated with at least one keyword matching a keyword from the search query. A list of bookmark sets which satisfy the query, i.e. are associated with matching keywords, are returned to the client browser in order to retrieve the most relevance records to user's request.

As to claim 66, Himmel teaches the claimed limitation "the signal bearing medium includes at least one of a recordable medium" as (col. 4, lines 25-50), "a transmission type medium" as transmission Control Protocol/Internet Protocol (col. 4, lines 25-50).

5. Claim 58 is rejected under 35 U.S.C. 103(a) as being unpatentable over Himmel et al (USP 6324566) in view Rose.

As to claim 58, Himmel discloses the claimed limitation subject matter in claim 38, except Himmel fails to teach the claimed limitations "for each of the plurality of records .....each record in the result set". However, Rose teaches Rose teaches that a message has been selected by the user, the client program informs the server 10 of the selected message. In response, the server retrieves the complete text of the message which is illustrated in fig. 3. If the user found the message to be of interest, a thumbs-up icon 38 can be selected. Alternatively, if the message was of little or no interest to the user, a thumbs-down icon 40 can be selected. When either of these two icons is selected, the indication provided thereby is forward to the server 10, where it is used to update the user profile, which contains messages. Each time a message is retrieved such as the data on which the message was posted to the system, the message's author, and the title or subject of the message, feedback information regarding the user's degree of interest is obtained, to thereby maintain an up-to-date profile for the user, where user's profile contains messages (col. 4, lines 25-60; col. 5, lines 20-60). This information shows that after user updates his or her interest in a particular message, user profile is updated to indicate of degree of interest for each message including date and time for each message.

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to modify Rose's teaching of updating user profile to indicate of degree of interest for each message including date and time for each message to Himmel's system in order to save time for searching or indicating user's degree of

Art Unit: 2172

interest in each retrieve document and provide a convenient mechanism for notifying users when new items of information have been posted.

### ***Allowable Subject Matter***

5. Claims 59-63 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As to claim 59, none of the available prior art of record teaches or fairly suggest the result set identifier for each search request....search request data structure. User feedback associated with document is well known in the art as taught by Rose.

However, prior art such as Rose does not teach "the result set identifier for each search request....search request data structure" in the specific combination as recited in claim 59.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Woods (USP 6182063).

Herz er al (USP 5835087).

### ***Contact Information***

Art Unit: 2172

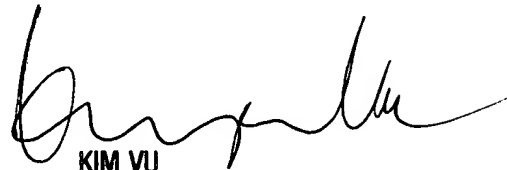
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cam-Y Truong whose telephone number is (703-605-1169). The examiner can normally be reached on Mon-Fri from 8:00AM to 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu, can be reached on (703-305-4393). The fax phone numbers for the organization where this application or proceeding is assigned is (703)-746-7239 (formal communications intended for entry), or: (703)-746-7240 (informal communication labeled PROPOSED or DRAFT).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703-305-3900).

Cam-Y Truong

5/1/02

  
KIM VU  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100